



2005 Water Year
BEAVER RIVER BASIN
03107500 Beaver River at Beaver Falls, PA

Latitude: 40° 45 ' 48"

Longitude: 080° 18 ' 55"

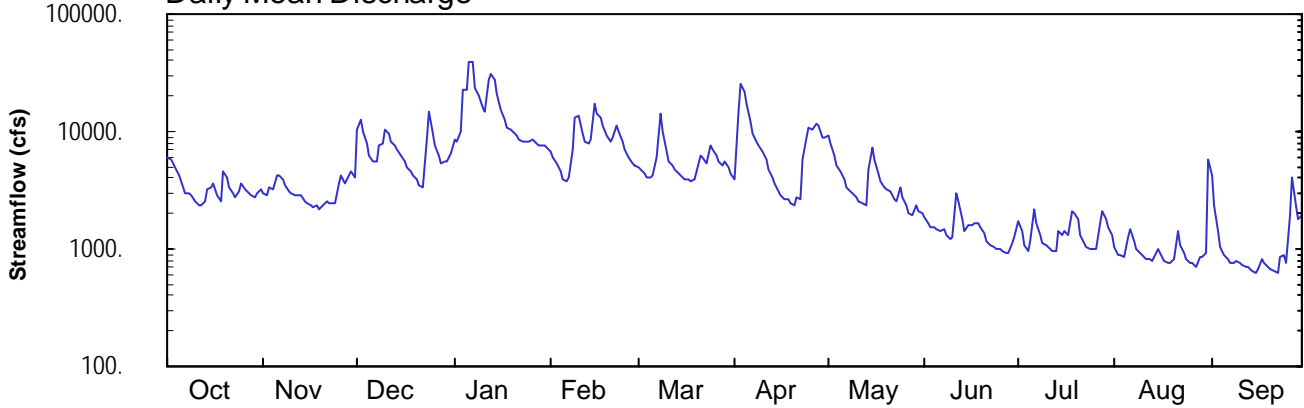
Hydrologic Unit Code: 05030104

Beaver County

Datum: 727.48 feet

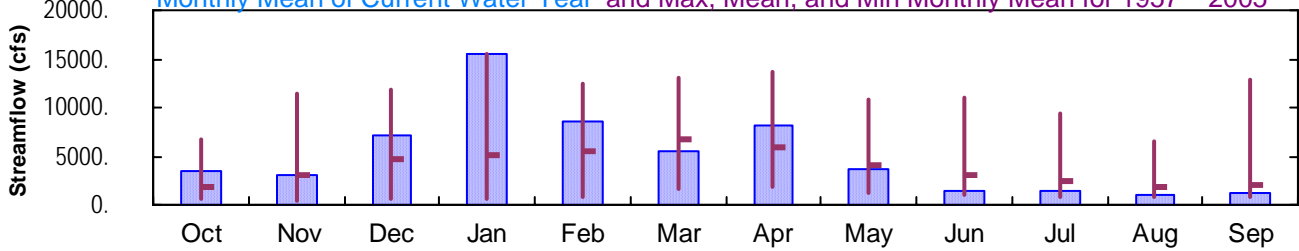
Drainage Area: 3106. mi²

Daily Mean Discharge

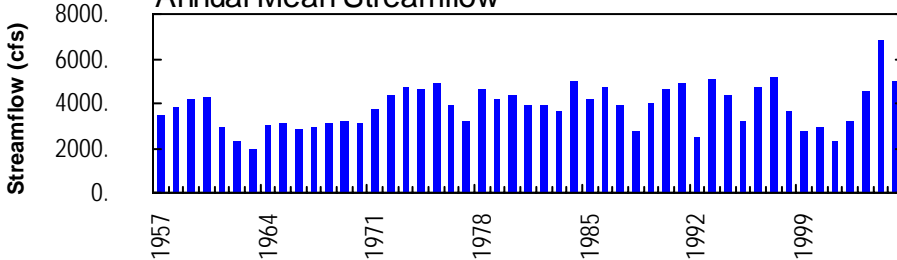


Monthly Statistics

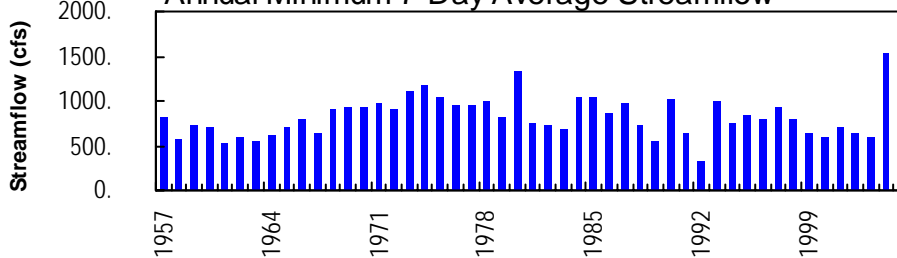
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1957 – 2005



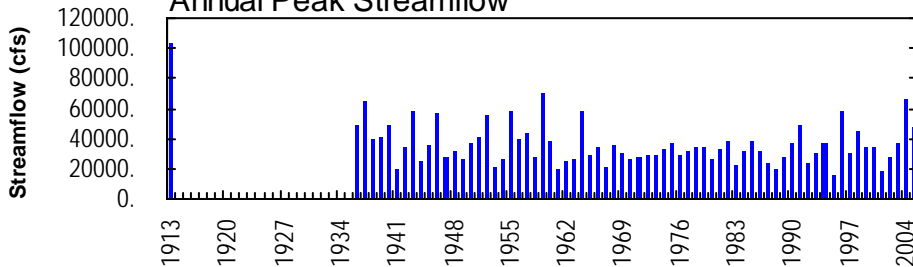
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



NO PHOTOS AVAILABLE FOR THIS SITE

BEAVER RIVER BASIN

03107500 BEAVER RIVER AT BEAVER FALLS, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°45'48", long 80°18'55", Beaver County, Hydrologic Unit 05030104, on left bank at Beaver Falls, 200 ft upstream from pumping plant of Beaver Falls Municipal Authority, 7.0 mi downstream from Connoquenessing Creek, at mile 5.5.

DRAINAGE AREA.--3,106 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to current year (fragmentary records only prior to October 1956). Gage-height records collected at same site since 1908 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1725: 1960 (adjusted runoff); Instantaneous low flow for water years 1997, 1998 were published in error.

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 727.48 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Dec. 3, 1941, nonrecording gage at site 200 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good above 2,000 ft³/s, and fair below, except those below 1,200 ft³/s, which are poor. Pumpage from gage pool, averaging 3.4 ft³/s in 1935 and 6.0 ft³/s at present, for local water supply, returns to river 2 mi downstream; information furnished by Beaver Falls Municipal Authority. Flow regulated since 1916 by Milton Reservoir, since November 1929 by Meander Creek Reservoir, since December 1933 by Pymatuning Reservoir (station 03100500), since December 1942 by Berlin Lake, since October 1943 by Mosquito Creek Lake, since December 1966 by Michael J. Kirwan Reservoir, since January 1967 by Shenango River Lake, all over 50 mi upstream, and since May 1969 by Lake Arthur (station 03106280) 29 mi upstream. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913 reached a stage of 17.4 ft, discharge, 103,000 ft³/s, from rating curve extended above 60,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6010	3000	10600	8440	6850	5020	3990	9110	1900	1740	1060	4190
2	5790	2820	12600	8190	6070	4850	14800	7770	1650	1400	897	2380
3	5440	3330	9910	10100	5280	4490	25300	6300	1530	1090	891	1410
4	4580	3260	7980	22300	4550	4120	21900	5130	1540	978	860	1040
5	4220	4190	6190	22600	3920	4140	17500	4580	1490	1180	1240	889
6	3320	4230	5510	40000	3700	4210	12300	3920	1440	2150	1500	817
7	3040	3860	5530	39500	4000	5970	9510	3380	1460	1690	1150	775
8	2930	3450	7470	23400	7120	14400	8250	3140	1290	1290	1000	771
9	2860	3150	7770	20400	13000	10100	7480	2950	1210	1140	925	785
10	2530	2950	10400	15700	13700	6760	6800	2810	1270	1060	878	766
11	2390	2850	9780	14500	9790	5600	5730	2580	2960	1010	836	738
12	2380	2870	8360	27100	8330	5170	4770	2450	2500	963	817	700
13	2540	2910	7650	30600	7780	4800	4030	2350	1810	944	796	695
14	3260	2580	6920	28000	8610	4400	3590	4720	1450	1400	914	656
15	3290	2420	6160	21300	17200	4180	3090	7190	1590	1290	992	618
16	3620	2390	5490	15600	14200	3890	2840	5840	1590	1400	869	667
17	2910	2280	4870	12700	13300	3850	2700	4370	1660	1330	802	820
18	2550	2320	4500	11000	11200	3820	2630	3770	1630	2080	768	775
19	4650	2200	4250	10400	9080	3980	2500	3320	1530	2050	746	716
20	4130	2340	3950	10100	8210	4610	2380	3220	1340	1760	829	681
21	3330	2560	3490	9250	8840	6320	2710	3120	1170	1330	1410	645
22	2960	2470	3390	8420	11000	5950	2640	2630	1080	1120	1080	630
23	2730	2470	8560	8290	9880	5300	5720	2500	1020	1050	933	840
24	3060	2480	14800	8080	8310	7690	8910	3310	997	993	823	898
25	3620	3620	9770	8280	7010	7080	10800	2740	983	1000	761	752
26	3260	4200	7680	8550	6000	6210	10300	2370	979	982	749	1920
27	3000	3630	6280	8150	5380	5580	11600	2030	936	1660	708	4050
28	2810	4210	5380	7650	5170	5090	11200	1950	924	2080	866	2340
29	2740	4620	5660	7600	---	5630	8930	2330	1120	1790	862	1790
30	2990	4100	5630	7490	---	5030	8740	2080	1240	1520	937	1940
31	3230	---	6590	7200	---	4390	---	2040	---	1340	5800	---
TOTAL	106170	93760	223120	480890	237480	172630	243640	116000	43289	42810	33699	36694
MEAN	3425	3125	7197	15510	8481	5569	8121	3742	1443	1381	1087	1223
MAX	6010	4620	14800	40000	17200	14400	25300	9110	2960	2150	5800	4190
MIN	2380	2200	3390	7200	3700	3820	2380	1950	924	944	708	618
CFSM	1.10	1.01	2.32	4.99	2.73	1.79	2.61	1.20	0.46	0.44	0.35	0.39
IN.	1.27	1.12	2.67	5.76	2.84	2.07	2.92	1.39	0.52	0.51	0.40	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2005, BY WATER YEAR (WY)

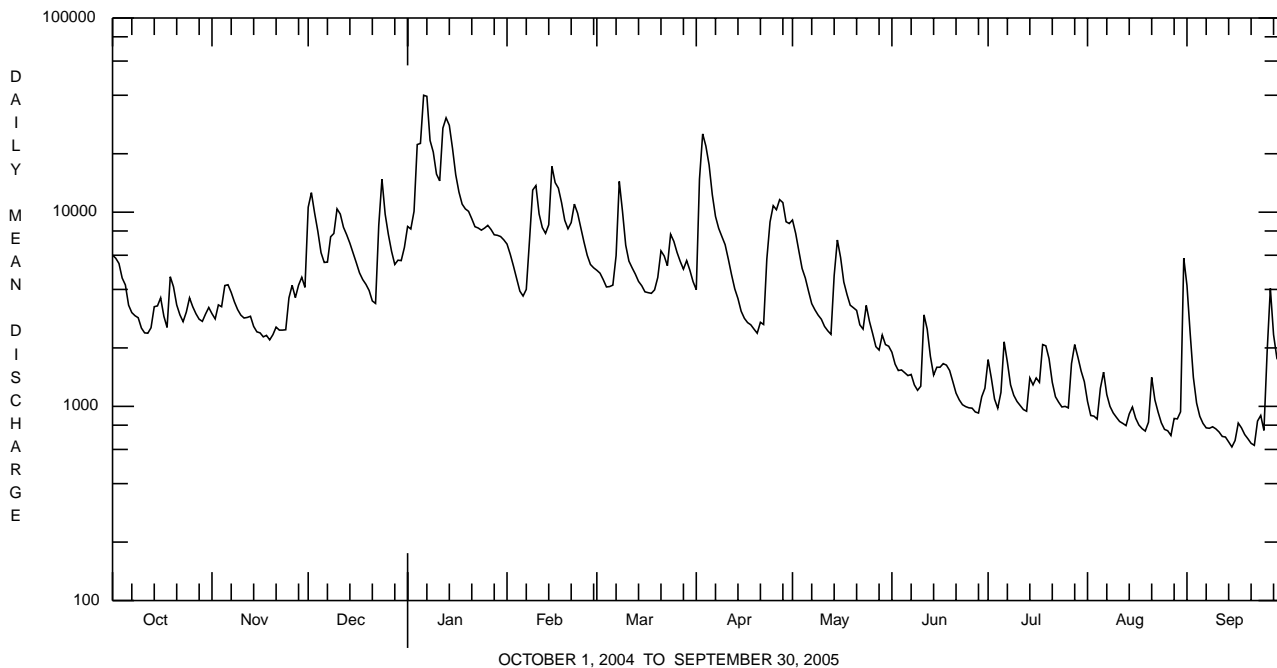
MEAN	1886	3043	4795	5062	5534	6674	5955	4145	2981	2382	1829	2060
MAX	6760	11520	11880	15510	12360	13040	13620	10880	11090	9298	6505	12800
(WY)	1991	1986	1991	2005	1990	1993	1957	1996	1989	2003	1980	2004
MIN	531	439	540	714	887	1606	1861	1271	966	916	777	739
(WY)	1992	1992	1961	1961	1963	1969	1971	1962	1992	1965	1991	1999

BEAVER RIVER BASIN

03107500 BEAVER RIVER AT BEAVER FALLS, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1957 - 2005	
ANNUAL TOTAL	2363470		1830182			
ANNUAL MEAN	6458		5014		3853	
HIGHEST ANNUAL MEAN					6864	2004
LOWEST ANNUAL MEAN					1938	1963
HIGHEST DAILY MEAN	58500	Sep 18	40000	Jan 6	65400	Jan 22 1959
LOWEST DAILY MEAN	1330	Aug 18	618	Sep 15	320	Nov 5 1991
ANNUAL SEVEN-DAY MINIMUM	1520	Jul 6	691	Sep 10	333	Nov 1 1991
MAXIMUM PEAK FLOW			47600	Jan 6	^a 69900	Jan 22 1959
MAXIMUM PEAK STAGE			11.96	Jan 6	14.42	Jan 22 1959
ANNUAL RUNOFF (CFSM)	2.08		1.61		1.24	
ANNUAL RUNOFF (INCHES)	28.31		21.92		16.86	
10 PERCENT EXCEEDS	10700		10300		8440	
50 PERCENT EXCEEDS	4640		3290		2400	
90 PERCENT EXCEEDS	2270		890		904	

a From rating curve extended above 57,000 ft³/s.



BEAVER RIVER BASIN

03107500 BEAVER RIVER AT BEAVER FALLS, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, μ S/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recover-able, mg/L (00916)	Magnesium, water, unfltrd recover-able, mg/L (00927)
NOV 2004 04...	1350	1028	9813	3090	8.7	7.8	7.6	420	415	13.5	150	43.2	9.6
JAN 2005 06...	0945	1028	9813	39100	12.0	7.9	7.7	255	263	5.0	90	25.7	6.2
MAR 02...	1245	1028	9813	4840	12.8	7.5	7.9	532	540	2.8	140	40.3	10.3
MAY 04...	1345	1028	9813	4990	10.5	7.5	8.0	386	389	10.0	120	35.0	8.4
JUL 06...	1300	1028	9813	2330	9.3	8.0	8.3	519	540	27.0	170	49.5	12.1
SEP 12...	1340	1028	9813	700	10.4	8.1	8.3	542	566	25.5	180	49.8	12.3

Date	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Fluoride, water, unfltrd mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat fltrd mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recover-able, μ g/L (01105)
NOV 2004 04...	84	.2	54.0	264	8	.040	.95	<.040	.05	.068	1.5	4.8	<200
JAN 2005 06...	46	<.2	33.3	156	234	.070	.84	<.040	.03	.333	1.7	4.6	4000
MAR 02...	71	<.2	56.7	334	6	.170	1.06	<.040	.04	.046	1.4	3.5	230
MAY 04...	69	<.2	51.2	230	10	.080	.67	<.040	.03	.069	1.1	--	290
JUL 06...	90	.3	69.8	136	12	--	1.19	<.040	.04	--	1.9	--	200
SEP 12...	88	.3	71.2	398	16	.040	1.64	.090	.08	.164	2.3	--	<200

Date	Copper, water, unfltrd recover-able, μ g/L (01042)	Cyanide amenable to chlorination wat unfltrd mg/L (00722)	Iron, water, unfltrd recover-able, μ g/L (01045)	Lead, water, unfltrd recover-able, μ g/L (01051)	Manganese, water, unfltrd recover-able, μ g/L (01055)	Nickel, water, unfltrd recover-able, μ g/L (01067)	Zinc, water, unfltrd recover-able, μ g/L (01092)	Phenolic compounds, water, unfltrd μ g/L (32730)
NOV 2004 04...	<10	<1.00	370	<1.0	60	<50	<10	<5
JAN 2005 06...	10	<1.00	10700	16	600	<50	120	8
MAR 02...	<10	<1.00	480	1.6	140	<50	<10	<5
MAY 04...	<10	<1.00	580	<1.0	100	<50	<10	<5
JUL 06...	<10	<1.00	440	2.1	130	<50	<10	<5
SEP 12...	<10	<1.00	440	1.3	200	<50	20	<5

BEAVER RIVER BASIN

03107500 BEAVER RIVER AT BEAVER FALLS, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a multiplate sampler that was deployed for 5 weeks. Samples represent counts per 100 animal (approximate) subsamples.

Date	11/03/04
Benthic macroinvertebrate	Count
Mollusca	
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
<i>Corbicula fluminea</i>	1
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Tubificida	
Tubificidae	2
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	1
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	4
Isopoda (AQUATIC SOWBUGS)	
Asellidae	
<i>Caecidotea</i>	2
Insecta	
Ephemeroptera (MAYFLIES)	
Heptageniidae	
<i>Stenacron</i>	5
<i>Stenonema</i>	2
Megaloptera	
Corydalidae (FISHFLIES AND DOBSONFLIES)	
<i>Nigronia</i>	2
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	2
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Stenelmis</i>	2
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	20
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	1
Total Organisms	44
Total Taxa	12